U.S. DEPARTMENT OF ENERGY

Office of Electricity Delivery and Energy Reliability



ENERGY ASSURANCE DAILY

August 31, 2005

Highlights/Major Developments

Update: Hurricane Katrina

HIGHLIGHTS

Insufficient Communication Impedes Slow Assessment of Oil and Gas Facilities

Without electricity, telephone service or cellular phone service, communication poses a problem for oil and natural gas companies trying to assess onshore and offshore damage from Hurricane Katrina.

NGI's Daily Gas Price Index posted Aug 31, 12:09 PM

http://intelligencepress.com/

Gulf Ports Still Closed - US Coast Guard

Currently, all Gulf ports remain closed. The Coast Guard is beginning to conduct port surveys and is moving assets into the area to reconstitute the aids-to-navigation system on the Mississippi River and other waterways. Hurricane Katrina caused catastrophic devastation, and the Coast Guard anticipates that there will be prolonged waterways management and environmental cleanup operations. Currently, five oil rigs from West Delta Platform are missing, one submersible rig is grounded at south pass, two mobile offshore drilling units are adrift, two semi-submersibles are listing, and the MARS facility is severely damaged. http://www.uscgstormwatch.com/external/?cid=1008&fuseaction=external.viewDocument&documentID=82

No Ocean-going Vessels Allowed on Mississippi River for an Indefinite Period

According to the Commanding Officer on duty at the Marine Safety Unit, Baton Rouge, LA, no deep draft vessels are going to be allowed up or down the Mississippi River for a long time. The lower Mississippi is going to need major dredging before such vessels can safely navigate the waterways. Refineries that received deliveries from such ships in the past can receive limited shipments by using shallow draft barges which can take an alternate route up the Mississippi by way of the Port Allen – Morgan City route. Source: Lt JG Daniel Levin-Brown, US Coast Guard, MSU Baton Rouge, LA.

OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE) U.S. DEPARTMENT OF ENERGY

Hurricane Katrina Situation Report #12
August 31, 2005 (10:00 AM EDT)
For latest report go to http://www.ea.doe.gov/hurricanes.html

Some 2.26 million customers have reported outages due to Hurricane Katrina in Louisiana, Mississippi, Alabama, Florida, and Georgia (see table below). Louisiana reports approximately 853,700 customers without power. Mississippi has about 958,000 customers without power, and Alabama has approximately 433,500 customers without power.

Extensive flooding continues as a major issue for electricity restoration. Availability of line crews is also an issue due to the extent of the damage in the area. As Florida utilities finish their restoration work their crews will begin to head towards other states.

ESF-12 has been activated by the Federal Emergency Management Agency to support multiple locations. OE staff are now at the National Response Coordination Center (NRCC) at FEMA HQ, FEMA Regions IV and VI, and the State Emergency Operation Centers (EOC) in Alabama, Louisiana, and Mississippi.

The Waterford III Nuclear Power plant sustained no damage except to buildings off site. Post disaster preparations are being initiated by FEMA and the NRC to clear the facility for a restart.

Electricity outages are a major issue in restoration of the Colonial Pipeline and the Plantation Pipeline. Key pump stations in LA and MS are without power. The LA Public Service Commission is working with power companies to assess the situation and provide guidance on priorities. FEMA Region IV is working with the MS EKOC on the same issue. OE is working closely with companies, states, and other Federal agencies to deal with these issues -- a key issue has to do with generators needed by the Colonial Pipeline. DOT, FEMA, and the Corps of Engineers are working with OE on this issue. In addition, OE has worked with the Mississippi State Highway Patrol to develop a procedure whereby the crews making emergency deliveries of those generators can cross state lines closed to normal traffic.

EPA issued waivers for Florida, Alabama, Mississippi and Louisiana to make available to first responders fuel that is currently restricted due to Clean Air Act restrictions. EPA will allow all parties in the fuel distribution system to supply and sell a 9.0. RVP gasoline and a 500 ppm-sulfur diesel with visible red dye. OE worked with EPA to obtain the waiver, which is effective immediately and will run through Sept. 15.

Secretary Bodman announced that DOE is working closely with companies who have submitted requests for loans of crude oil from the Strategic Petroleum Reserve.

PETROLEUM AND GAS INFORMATION

According to MMS, shut-in oil production is at 1,427,969 barrels per day. This production is equivalent to 95% of the daily oil production in the Gulf of Mexico, which is usually approximately 1.5 million barrels per day. Shut-in gas production is currently at 8,798 billion cubic feet per day, equivalent to 88% of daily gas production in the Gulf of Mexico.

According to the press, the following operators have reported:

Royal Dutch Shell said its Mars platform sustained significant damage BP observed no damage to several of its facilities from helicopter flyovers. Kerr-McGee plans to restart half of its 130,000 bbl/day production over the weekend. ExxonMobil, Conoco, and Apache are inspecting their facilities. The Strategic Petroleum Reserve at New Orleans Elmwood complex remains shut down. Bayou Choctaw, Bryan Mound, Big Hill and West Hackberry sites, however, are operational and will be able to provide crude oil in the loan program noted above.

Updated at 4:00 pm August 31, 2005: Colonial and Plantation petroleum product pipelines, which provide the majority of gasoline, diesel fuel, and jet fuel to the Southeast, Mid-Atlantic, and Northeast states, were not operating due to loss of power at key pump stations in LA and MS until late this afternoon. At 4:00 pm Colonial announced that they were restarting operations on Main lines 1 and 2 over the next several hours. Initial service was going to provide between 25% and 35% of Colonial's normal operating capacity.

Dixie pipeline (a propane line) is also shut down. Other product pipelines are not experiencing any problems: TEPPCO is moving products from Texas into the Northeast and Centennial is moving products from Texas into Illinois. Capline, a crude oil pipeline serving the Midwest, is shut down.

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The following table displays refineries located in states impacted by Hurricane Katrina:

Refineries Located in States Impacted by Hurricane Katrina

COMPANY NAME	STATE	SITE	Bbl/day	Status	
COMPANY_NAME		~	(calendar)		
Shell Chemical	Alabama	Saarland	80,000	Not available	
Citgo Petroleum Corp. *	Louisiana	Lake Charles	324,300	Loss of supply from Calcasieu channel closing. Reduced runs	
ConocoPhillips *	Louisiana	Belle Chasse	247,000	Shutdown; expect water damage	
ConocoPhillips *	Louisiana	Lake Charles	239,400	Loss of supply from Calcasieu channel closing	
Chalmette Refining LLC	Louisiana	Chalmette	187,200	Shutdown; expect water damage	
ExxonMobil Refining & Supply Co. *	Louisiana	Baton Rouge	493,500	Correction: Continues to run at reduced runs. Refinery has not gotten back to normal operations.	
Marathon Ashland Petroleum LLC.	Louisiana	Garyville	245,000	Shutdown	
Murphy Oil USA Inc.	Louisiana	Meraux	120,000	Shutdown – expect water damage	
Motiva Enterprises LLC	Louisiana	Convent	235,000	Shutdown	
Motiva Enterprises LLC	Louisiana	Norco	226,500	Shutdown	
Placid Oil *	Louisiana	Port Allen	48,500	Shutdown – plant on warm circulation	
Valero Refining Co Louisiana	Louisiana	Krotz Springs	80,000	Reduced runs	
Valero Saint Charles Refinery	Louisiana	Norco	185,000	Shutdown – out 1 or 2 weeks	
Chevron USA Inc. *	Mississippi	Pascagoula	325,000	Shutdown	
Premcor	Tennessee	Memphis	180,000	Loss of Capline supply; Reduced runs	
Koch *	Texas	Corpus Christi	156,000	None	
Total *	Texas	Port Arthur	285,000	Loss of supply; Reduced runs	

^{*} Refineries with company owned and operated on-site power generation.

ELECTRICITY INFORMATION

STATE OUTAGE DATA (8/31/05 7:00 AM)

Utility	Customers w/o Power	Total Customers	% Customers w/o Power from Katrina
Alabama	433,500	2,339,004	18.5%
Florida	80,705	9,075,577	<1%
Georgia	12,500	4,156,052	<1%
Louisiana	853,713	2,130,925	40%

STATE REPORTS

Alabama

433,500 customers (as of 7:15 AM CDT 8/31/05) are without power in Alabama due to Katrina. Of these, 335,984 are in the Alabama Power service area. In addition, 77,558 Co-op customers have reported outages and 20,000 Municipal customers have reported outages. Alabama Power Company has crews arriving from South Carolina and North Carolina. Alabama Power has at least 700 poles down and almost 6,400 spans of distribution wire down. The company has warned customers that although crews have already restored power to many of the customers who lost power during Katrina, remaining outages may take longer to restore. In addition, the company has commitments from utilities in New York, New Jersey, Massachusetts, Ohio and Oklahoma to support restoration efforts. The Co-op Association stated that fuel for their restoration crews is becoming an issue. Suppliers are allocating fuel based on the "Regulation of Allocation", and the Co-ops are concerned they may not have enough fuel to keep all their crews operating.

Alabama Public Service Commission- Gas Pipeline Safety staff reported that Mobile Gas cut off service to about 40 customers in the Bayou la Batre area last night. Coden, along with areas in and around the river, has been shut in at the regulator station. Many of their facilities in downtown Mobile are under 12 feet of water but pressure is being maintained in order to minimize damage by keeping water out of the piping. No leaks or damage has yet been detected in the downtown areas.

Legacy (an offshore drilling company) reported that the US Coast Guard has blocked all channels. They are not able to assess the damage to rigs in the Dauphin Island area as there are no helicopters available for hire.

An oil rig that broke away and struck a bridge also sheared a pipeline owned by Plains Marketing.

Mississippi and Louisiana

957,815 (as of 8:30 AM 8/31/05) customers are without power in Mississippi due to Katrina. Of these, 236,876 are in the Entergy service area, 196,000 are in the Mississippi Power service area, and 425,939 are in the Mississippi Electric Power Association service area. This is an increase from the last report due to a report of 100,000 outages from TVA.

Louisiana Public Service Commission reports approximately 853,713 customers, or 40% of customers in the state, are without power (as of 2:00 AM 8/31/05). This number includes all utility, cooperatives, and municipal power providers affected by hurricane Katrina.

Louisiana Outages by Major Utility (8/31/05 2:00 AM)

Electric Utility	Customers w/o Power	Number of Consumers (1)	% customers w/o power
Entergy Louisiana Inc	421,447	653,929	64%
Entergy Gulf States Inc	80,445	342,443	23%
Cleco Power LLC	79,672	257,299	31%
Entergy New Orleans Inc	198,762	215,163	92%
Dixie Electric Membership Corp	39,415	85,307	46%
Washington-St Tammany E C, Inc	20,000	41,304	48%
South Louisiana Elec Coop Assn	13,912	19,180	73%
City of Morgan	60	6,000	<1%

Just under 1 million Entergy customers remain without power (as of 5 AM 8/31/05) in Louisiana and Mississippi. Hurricane Katrina caused extensive damage in the Entergy service area and, due to the scope and amount of damage to its electrical system, Entergy expects a long and difficult restoration. Entergy has 4,000 line workers committed to restoring service and is working to bring in more. Entergy is in contact with other utilities and contract workers to bring in additional workers and pre-position as many out-of-state utility crews as possible to quickly move in to help restore service.

Florida

Approximately 80,700 customers, 1 percent of customers in the state, remain without power in Florida due to Katrina. This includes 69,450 Florida Power & Light customers and 11,255 Gulf Power customers. All Cooperative customers have been restored. FPL has restored power to 95 percent of its customers as of 6:00 AM 8/31. FPL expects to restore all of Broward County customers by Thursday night, and all of Miami-Dade by Friday night. They report that as soon as work is completed in Florida line personnel and contractors will be joining other utility companies and contractors who will be headed to the Gulf Coast area to support that restoration effort.

Gulf Power estimates that power will be restored to all customers who can take power by Wednesday evening (8/31). Gulf Power plans to send crews on 9/1 to support Mississippi Power restoration efforts.

Georgia

Approximately 12,500 (as of 1:00 PM 8/30/05) customers are without power in Georgia. All of those without power are Georgia Power customers.

Additional Information:

Gulf of Mexico Shut-in Production MMS release #3329

Based on the latest data available from the Minerals Management Service, 58.85% of 819 manned platforms and 58.96% of 137 rigs currently operating in the GOM have been evacuated as of 11:30 a.m. August 31. Shut in oil production is 1,371,814 BOPD or 91.45% of daily production (which is currently approximately 1.5 million BOPD), and shut-in gas is 8.345 BCFPD or 83.46% of daily production (which is currently approximately 10.0 BCFPD). The cumulative shut-in oil production for the period 8/26/05 - 8/31/05 is 6,055,220 bbls or 1.106% of annual production. The cumulative shut-in gas production for the period 8/26/05 - 8/31/05 is 34.190 BCF or 0.937% of annual production

This survey is reflective of 70 companies' reports as of 11:30 a.m. Central Time.

Districts	Lake Jackson	Lake Charles	Lafayette	Houma	New Orleans	Total
Platforms Evacuated	37	86	75	107	177	482
Rigs Evacuated	3	11	15	26	24	79
Oil, BOPD Shut-in	33,447	48,243	234,204	344,610	711,310	1,371,814
Gas, MMCF/D Shut-In	635.47	1,730.30	1,101.55	2,040.80	2,837.76	8,345.87

Note: `The cumulative numbers reflect updated production numbers from all previous reports. The reports only represent input received by 11:30 a.m. CDT. If a company does not report by 11:30 a.m. it is not included in the special information release, but it is included in the cumulative shut-in production. This may result in an apparent increase in the cumulative report amount. http://www.mms.gov/ooc/press/2005/press/2005/press/201.htm

http://www.mms.gov/ooc/press/2003/press0631.htm

Electricity

10,000 Gibson Electric Customers Without Power in Tennessee

Fallen trees downed power lines and caused outages to more than 10,000 of Gibson Electric Membership Corporation customers throughout the utility's six-county northwest Tennessee service area. As of Wednesday morning, approximately 1,300 customers remained without power. http://www.ucmessenger.com/cgi-bin/LiveIQue.acgi\$rec=47741?frontnews

Grand Gulf Nuke in Mississippi Operating at Reduced Output August 30

The nuclear plant voluntarily reduced power generation to aid in the restoration of electrical grid stability. http://www.dhs.gov/interweb/assetlibrary/DHS Daily Report 2005-08-31.pdf

River Bend Nuke in Louisiana Operating at Reduced Output August 30

The nuclear plant voluntarily reduced power generation to aid in the restoration of electrical grid stability. http://www.dhs.gov/interweb/assetlibrary/DHS Daily Report 2005-08-31.pdf

NRC Approves 20-Year Extensions for Cook Operating Licenses

The Nuclear Regulatory Commission has approved the extension of operating licenses for both units at the American Electric Power Cook nuclear generating station located in Bridgman, Michigan. The licenses will allow the operation of Unit 1 until 2034 and the operation of Unit 2 until 2037. http://www.aep.com/newsroom/newsreleases/default.asp?dbcommand=DisplayRelease&ID=1225

SCE's 210-MW Mohave Coal-fired Unit in Nevada Shut August 31

Reuters 15:43, August 31, 2005

SCE's 522-MW Mountainview 3 Gas-fired Unit in California Shut August 31

Reuters 15:43, August 31, 2005

Update – Exelon's 912-MW Dresden Unit 2 in Illinois Shut August 30

The 912-megawatt Unit 2 at the Dresden nuclear generating station in Illinois was shut down yesterday for repair to its main transformer.

Bloomberg 11:01, August 31, 2005

For additional information related to Hurricane Katrina, see Highlights/Major Developments

Petroleum

Bush Administration Releases Reserves

To help the oil infrastructure affected by Hurricane Katrina, the Bush administration announced Wednesday that it will release oil from the Strategic Petroleum Reserve, which can deliver 5 million barrels a day, more than three times the amount that has been closed in the Gulf. Several companies submitted requests to receive oil from the reserve. Citgo Petroleum Corporation asked for 250,000 to 500,000 barrels to maintain operation at its Lake Charles, La., refinery. Placid Refining Co. LLC requested approximatedly 1 million barrels for its Port Allen, Louisiana refinery.

http://www.heraldsun.com/business/wire/22-641691.html

Bloomberg 11:47 and 14:07, August 31, 2005

Oil Futures Reaches Record High August 30

As damage assessments from Hurricane Katrina showed extensive losses, NYMEX crude oil futures reached a record \$70.85 per barrel on August 30. Concerns over the shutdown of at least eight Gulf Coast refineries prior to Labor Day are have maintained upward pressure on the market. However, Crude oil fell back slightly on Wednesday when the federal government announced it would release oil from the Strategic Petroleum Reserve.

Source: Oil Daily (Wednesday, August 31, 2005)

Reuters 15:20, August 31, 2005 http://www.energyintel.com/

Arizona Gas Stations Report Disruptions August 30

Several service stations in the Phoenix area reported gasoline disruptions Tuesday. State officials assured that plenty of gasoline is available, and that disruptions occurred only in the cases of a few operators who experienced business-related difficulties.

http://www.azcentral.com/arizonarepublic/

Several Gas Stations on Allocation in Indianapolis, Indiana

Several stations of the gasoline service chain Crystal Flash ran out of gasoline August 31. However, the company continues to send reduced quantities of fuel to its stations.

http://www.wishtv.com/Global/story.asp?S=3788763&nav=0Ra7dyEr

Neste Oil Plans to Resume Gasoline Supply to U.S. in October

Finland's only oil refiner, Neste Oil, which usually ships 50,000 to 100,000 metric tons of gasoline a month to North America, shut down last week after it completed maintenance at its Porvoo refinery. Neste plans to resume shipment in October.

Bloomberg 10:10, August 31, 2005

Nymex Gasoline Futures Climb 20Percent on Refinery Concerns

Nymex gasoline futures opened at a record high on Tuesday. Traders expect most refineries to experience several days of power outages and then slowly come back to normal levels over the next few weeks. Source: Oil Daily (*Wednesday*, *August 31*, 2005)

http://www.energyintel.com/

Hurricane Causes Significant Damage to ENSCO Rig

ENSCO 29, one of ENSCO's three Gulf of Mexico platform rigs, sustained significant damage as a result of Hurricane Katrina.

http://phx.corporate-ir.net/phoenix.zhtml?c=105001&p=irol-newsArticle&ID=751024&highlight=

Construction Begins on New Ethanol Plant in Michigan

Construction of a new 57-million-gallon-per-year ethanol plant in Riga, Michigan, has begun by Midwest Grain Processors, LLC. Owned by MGP Cooperative and Great Lakes Ethanol, LLC, the plant is expected to annually process 20 million bushels of corn into 57 million gallons of ethanol. *Alternative Transportation Fuels Today*, Wednesday, August 31, 2005

For additional information on petroleum, see Highlights/Major Developments

Natural Gas

Some PJM Natural Gas-fired Generating Stations Out of Service

PJM Interconnection, the nation's biggest power grid operator serving more than 51 million people in the Mid-Atlantic and Midwest regions, reported some natural gas-fired generating facilities were out of service or operating at reduced output due to reduced fuel supplies.

Reuters 12:33, August 31, 2005

Tennessee Gas Closes Part of U.S. Gulf Coast Pipeline

High water near Tennessee Gas Pipeline's Station 527, the Port Sulpher compressor station in southern Louisiana, forced the company to close all meters upstream of the station. Bloomberg 10:48, August 31, 2005

Natural Gas Futures Reach Record High Tuesday

Continued uncertainty about Hurricane Katrina's impact on production infrastructure caused October natural gas futures to settle at a record \$11.659 on August 30. However, natural gas futures fell back again Wednesday as output on platforms started to be restored.

 $\underline{\text{http://powermarketers.netcontentinc.net/newsreader.asp?ppa=8kowu\%5D\%5BegqvpllSVgbt\%3EEvbfek\%5Cvpl}$

Bloomberg 14:00, August 31, 2005

Sonat Shuts in Gas Flow August 30

Southern Natural Gas Company declared a force majeure upstream of Toca compressor station in southern Louisiana on Tuesday. The company said that natural gas would not be accepted into its pipeline system upstream of the station until a damage assessment is made. Bloomberg 11:29, August 31, 2005

For additional information on natural gas, see Highlights/Major Developments

Other News

CSX and Norfolk Southern Suspend Service to New Orleans and Mobile

After suspending service on August 28, CSX and Norfolk Southern railroads issued an embargo on all traffic traveling between New Orleans and Mobile, affecting coal shipments to utilities in the area and to export ports. Neither railroad could estimate when service would return. http://www.platts.com/Coal/News/6068235.xml?S=n

Energy Prices

	Latest (08/31/05)	Week Ago	Year Ago
CRUDE OIL West Texas Intermediate US \$/Barrel	68.63	67.10	42.23
NATURAL GAS Henry Hub \$/Million Btu	12.69	10.02	5.04

Source: Reuters

This Week in Petroleum from the Energy Information Administration (EIA)

http://tonto.eia.doe.gov/oog/info/twip/twip.asp

Updated on Wednesdays

Weekly Petroleum Status Report from EIA

 $\frac{\text{http://www.eia.doe.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html}{\textit{Updated after 1:00pm (Eastern time) on Wednesdays}}$

Natural Gas Weekly Update from EIA

http://tonto.eia.doe.gov/oog/info/ngw/ngupdate.asp

Updated after 2:00 pm (Eastern time) on Thursdays

ENSEC threat awareness blog site from Energy Assurance

http://ensec.blogspot.com